

## WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:

an edge detection means for detecting an edge in  
image data;

5 a thinning judgment means for judging whether or  
not a thinning process in said image data should be  
performed; and

an edge density conversion means for receiving a  
discrimination signal from said thinning judgment means  
10 to perform density conversion of a pixel which is  
judged to be subject to the thinning process.

2. An apparatus according to claim 1, wherein  
said edge density conversion means refers to a lookup  
table.

15 3. An apparatus according to claim 1, further  
comprising an edge detection means effected by a  
filtering process.

4. An apparatus according to claim 1, wherein  
said edge detection means uses a first-order  
20 differential filter for a filtering process.

5. An apparatus according to claim 4, wherein,  
after said first-order differential filter performs  
edge detection in four directions of a main scanning  
direction, an auxiliary scanning direction, and two  
25 oblique directions, whether or not the detection result  
is made effective can be set separately in relation to  
each of said four directions.

